

CLAIMS

1. A receiver comprising:

a crystal oscillator for generating a signal required for reception operation of broadcast waves;

a signal generation unit for generating a test signal for an operation test by using an output signal of said crystal oscillator;

an input unit for inputting the test signal to an antenna input section when the operation test is performed; and

a determining unit for determining quality of reception operation based on a measured signal generated when reception operation is performed for the test signal.

2. The receiver according to claim 1, wherein said input unit is a switch provided between said signal generation unit and said antenna input section.

3. The receiver according to claim 1, wherein said crystal oscillator is used for generating a reference signal inputted to a frequency synthesizer for generating a local oscillation signal.

4. The receiver according to claim 1, wherein said crystal oscillator is used for generating a clock signal required for operating logic circuits.

5. The receiver according to claim 1, comprising an AM circuit for performing reception operation for an AM modulation wave signal inputted to said antenna input section, wherein

a frequency of a signal obtained by dividing the output signal of said crystal oscillator is included in a frequency band of said AM modulation wave signal.

6. The receiver according to claim 1, comprising an FM circuit for performing reception operation for an FM modulation wave signal inputted to said antenna input section, wherein

a frequency of a signal obtained by multiplying the output signal of said crystal oscillator is included in a frequency band of said FM modulation wave signal.

7. The receiver according to claim 1, comprising a switching control unit for switching the reception operation of said broadcast waves and the determination operation by said determining unit using the measured signal.

8. The receiver according to claim 1, wherein said signal generation unit is a frequency divider for generating said test signal having a frequency included in a reception band of the broadcast waves by dividing the output signal of said crystal oscillator.

9. The receiver according to claim 1, wherein said signal generation unit is a PLL circuit and a oscillator for generating said test signal having a frequency included in a reception band of the broadcast waves by using the output signal of said crystal oscillator as a reference signal.

10. The receiver according to claim 1, wherein said signal generation unit is a frequency synthesizer for generating said test signal having a frequency included in a reception band

of the broadcast waves by using the output signal of said crystal oscillator as a reference signal.

11. The receiver according to claim 1, wherein said signal generation unit is a multiplier for generating said test signal having a frequency included in a reception band of the broadcast waves by multiplying the output signal of said crystal oscillator.

12. The receiver according to claim 1, wherein said measured signal is an intermediate frequency signal generated by mixing said test signal and a local oscillation signal, and wherein said determining unit detects a level of said intermediate frequency signal.

13. The receiver according to claim 1, wherein said measured signal is a signal after a detection processing is applied to the intermediate frequency signal, and wherein said determining unit detects a level of the signal subjected to said detection processing.

14. The receiver according to claim 1, further comprising a notifying unit for notifying quality of reception operation based on the determination result of said determining unit.

15. The receiver according to claim 14, wherein a display unit for displaying contents of the broadcast waves in reception is used as said notifying unit.

16. The receiver according to claim 14, wherein said notifying unit is an illumination unit for notifying quality of reception operation depending on a lighting state.